

Drift of a flat particle at longitudinal oscillations of gas in an open tube

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Abstract

© Published under licence by IOP Publishing Ltd. The particle motion is experimentally investigated at nonlinear oscillations of gas in the tube and in the external field near the open end in the shock-free mode. Dependence is obtained for the coordinates of the particle along the tube from time for various frequencies and amplitudes of displacement of the piston. Drift is set for a particle from the open end of the tube to the piston. It is determined that the particle moves into an external field at the open end outside the tube without appreciable oscillations. Detected position of the particle at the open end, wherein the particle does not perform drift towards the inside and outside of the tube.

<http://dx.doi.org/10.1088/1742-6596/567/1/012042>
